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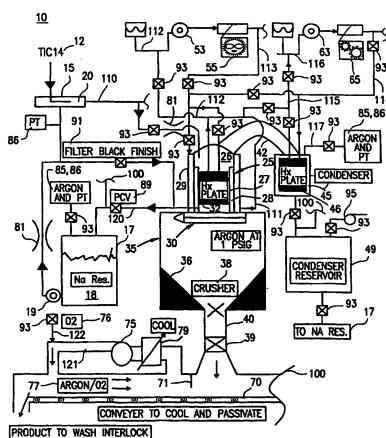
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### (54) Title: SEPARATION SYSTEM OF METAL POWDER FROM SLURRY AND PROCESS



(57) Abstract: A system and method of separating metal powder from a slurry of liquid metal and metal powder and salt is disclosed in which the slurry is introduced into a first vessel operated in an inert environment when liquid metal is separated from the metal powder and salt leaving principally salt and metal powder substantially free of liquid metal. The salt and metal powder is transferred to a second vessel operated in an inert environment with both environments being protected from contamination. Then the salt and metal powder are treated to produce passivated powder substantially free of salt and liquid metal. The method is particularly applicable for use in the production of Ti and its alloys.





ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C22B9/02 C22B9/04 C22B34/12 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) C22B B01D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, COMPENDEX C. DOCUMENTS CONSIDERED TO BE RELEVANT Category a Citation of document, with indication, where appropriate, of the relevant passages Relevant to daim No. X US 6 409 797 B2 (ANDERSON RICHARD PAUL ET 1,2 AL) 25 June 2002 (2002-06-25) 4-10,14, cited in the application 19,20 Y column 4, lines 24-29 and lines 49-55; 11,12 column 7, lines 32-45 US 4 379 718 A (GRANTHAM LEROY F ET AL) Y 11,12 12 April 1983 (1983-04-12) abstract; column 6, lines 32-46 US 3 867 515 A (BOHL LESTER E ET AL) 18 February 1975 (1975-02-18) US 5 437 854 A (WALKER ROY G ET AL) A 1 August 1995 (1995-08-01) Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the \*A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the arl. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 19 December 2003 02/01/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Bjoerk, P Fax: (+31-70) 340-3016



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